

Remarks

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendments, claims 2-4, 7-29, 44-47, 51 and 52 are pending in the application, with claim 2 being the independent claim. Claim 2 has been amended to recite that amino acid 1 of SEQ ID NO: 8 is the threonine following the initial methionine. Support for this amendment may be found in the specification at the end of paragraph [0161]. Additionally, claim 2 has been amended to clarify that the amino acid sequence of the wild-type MMLV polymerase domain is within SEQ ID NO: 8. Claims 19 and 25 have also been amended to correct obvious typographical errors. These amendments introduce no new matter, and their entry is respectfully requested.

Based on the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Claim Interpretation

The Office Action states that “not only do the claims not state that there is not a methionine at the amino terminus, but SEQ ID NO: 8 clearly has a methionine at the amino terminus. Thus, the claims will be read with SEQ ID NO: 8 as the base material.”

Claim 2 as amended recites that “amino acid number 1 of SEQ ID NO: 8 is the threonine following the initial methionine.” Since the claims now clearly state that amino acid number 1 is the threonine following the initial methionine, the claims should be read as such.

Rejections Under 35 U.S.C. § 112, 2nd Paragraph

Claims 2, 3, 7, 10-18, 24, 26-28, 44-47, 51 and 52 were rejected as being indefinite since it was deemed unclear as to how leu52 can be substituted in claim 2 (from which all of the current claims depend) when the amino acid at position 52 in SEQ ID NO: 8 is proline. The Office Action then states that the numbering of the sequences in the claim relative to the numbering in the SEQ ID NO are not consistent. The Examiner then suggests potential claim language that may solve this problem, and states that such language has support from the specification and would not be new matter. Office Action, page 4, second paragraph. Claim 2 as amended incorporates language that corresponds to that suggested by the Examiner.

Thus, Applicants respectfully request reconsideration and withdrawal of the rejection under 35 U.S.C. § 112, second paragraph.

Rejection Under 35 U.S.C. § 102(a)

Claims 2, 3, 12-18, 24 and 26-28 were rejected under 35 U.S.C. § 102(a) as being anticipated by Arakawa et al. (JP 2000-139457). The rejection is respectfully traversed.

The Office Action states that “a review of the sequence of Arakawa shows...amino acid 52 is proline, not leucine. Further, the amino acid at 204 is Leucine, not histidine, and the position at 289 is valine and the position at 306 is Glycine.” The amended claims recite, as suggested by the Examiner, that ***amino acid number 1 SEQ ID NO: 8 is the threonine following the initial methionine.*** Since the amended claims recite that the numbering starts at the threonine following the initial methionine, then the MMLV RT sequence of Arakawa et al. should be considered with respect to the same point of reference. Thus, the numbering of the amino acid positions of Arakawa et al.

should be reduced by one, such that thr2 in the Arakawa MMLV sequence is thr1 when considered with respect to the point of reference provided in the present claims. Consequently, the Arakawa pro52, leu204, val289 and gly306 are actually pro51, leu203, val288 and gly305, when considered with respect to the point of reference provided in the present claims. Thus, the amino acids at positions 52, 204, 289 and 306 of the sequence of Arakawa *et al.* are leu, his, met, and thr, respectively. The substitution of an amino acid at these positions is neither taught nor suggested by Arakawa *et al.* Since claim 2 recites that the amino acids at these positions are **not** leu, his, met, and thr, respectively, the claims are not anticipated by Arakawa *et al.*

Thus, reconsideration and withdrawal of the rejection under 35 U.S.C. §102(b) is respectfully requested.

Rejection under 35 U.S.C. § 103(a)

Claims 44-47 were rejected under 35 U.S.C. § 103(a) as allegedly being obvious over Arakawa *et al.* in view of p. 39 of the Stratagene Catalog (1988). Applicants respectfully traverse the rejection.

Claims 44-47 are directed to a kit comprising a retroviral reverse transcriptase of claim 2. As discussed above, Arakawa *et al.* neither teach nor suggest all of the elements of claim 2. Page 39 of the Stratagene catalog does not remedy this deficiency. Therefore, claims 44-47 are not obvious over the combination of these cited documents. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection under 35 U.S.C. § 103 (a).

Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply and allowance of all pending claims, are respectfully requested.

Respectfully submitted,

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